



STIC Search Report

EIC 3700

STIC Database Tracking Number: 148225

TO: Linda Sholl
Location: RND 8a31
Art Unit: 3700
Monday, March 21, 2005

Case Serial Number: 10/608006

From: Terry Solomon
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RND 8b31
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Search Notes

No current or past litigation found involving US pat. 6329643.

Sources:

Lexis/Nexis
Questel-Orbit

653460 (09) 6329643 December 11, 2001

Time of Request: March 18, 2005 12:57 PM EST

Research Information:

Utility, Design and Plant Patents
patno=6329643

UNITED STATES PATENT AND TRADEMARK OFFICE GRANTED PATENT

6329643

December 11, 2001

Method of temperature-calibrating heat treating apparatus

REISSUE: June 30, 2003 - Reissue Application filed Ex. Gp.: 3742; Re. S.N. 10/608,006 (O.G. October 7, 2003)

APPL-NO: 653460 (09)

FILED-DATE: August 31, 2000

GRANTED-DATE: December 11, 2001

ASSIGNEE-AT-ISSUE: Tokyo Electron Limited, Tokyo, Japan (JP), 03

ASSIGNEE-AFTER-ISSUE: August 31, 2000 - ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS)., TOKYO ELECTRON LIMITED 3-6 AKASAKA 5- CHOME, MINATO-KU TOKYO 107-8481 JAPAN, Reel and Frame Number: 11070/0262

LEGAL-REP: Oblon, Spivak, McClelland, Maier & Neustadt, P.C. - ##0

Selected file: PLUSPAT
PLUSPAT - (c) Questel-Orbit, All Rights Reserved.
Comprehensive Worldwide Patents database

** SS 2: Results 1
PRT SS 2 MAX 1 LEGALALL

1 / 1 PLUSPAT - ©QUESTEL-ORBIT

Patent Number :

US6329643 B1 20011211 [US6329643]

Title :

(B1) Method of temperature-calibrating heat treating apparatus

Patent Assignee :

(B1) TOKYO ELECTRON LTD (US)

Patent Assignee :

Tokyo Electron Limited, Tokyo [JP]

Inventor(s) :

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YASUHARA MOYURU (JP)

Application Nbr :

US65346000 20000831 [2000US-0653460]

Priority Details :

JP24891299 19990902 [1999JP-0248912]

Intl Patent Class :

(B1) F27D-003/12 H05B-001/02

EPO ECLA Class :

C30B-025/10

C30B-031/12

F27D-019/00

H01L-021/00S8A

H01L-021/00S8B

US Patent Class :

ORIGINAL (O) : 219497000; CROSS-REFERENCE (X) : 432241000

Document Type :

Basic

Citations :

US5001327; US5258601; US5273424; US5387557; US5500388; US5616264;
US5813851; US5875416; US6095806; US6222164; JP3-145121; JP5-267200

Publication Stage :

(B1) U.S. Patent (no pre-grant pub.) after Jan. 2, 2001

Abstract :

A second vertical heat treating apparatus is temperature-calibrated based on a heat treatment result obtained by a first vertical heat treating apparatus for reference. First, temperature measurement wafers is heated in the first apparatus to obtain set values of temperature controllers for a target value of temperature. Then, wafers are subjected to an oxidizing process in the first apparatus by using these set values to form an oxide film. The thickness of the oxide film is measured and recorded as a reference film thickness. Then, wafers are subjected to an oxidizing process in a second apparatus at temperatures near the target value to form an oxide film. The thickness of the oxide film is measured, and difference in thickness between the oxide film formed in the second apparatus and the reference film thickness is obtained. The oxidizing process in the second apparatus is repeated to obtain set values of temperature controllers for the second apparatus at the time when the difference in film thickness becomes zero. The second apparatus is temperature-calibrated on the basis of the set value thus obtained.

Update Code :

2001-51

1 / 1 LGST - ©EPO

Patent Number :

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Application Number :

US65346000 20000831 [2000US-0653460]

Action Taken :

20000831 US/AS-A

ASSIGNMENT

OWNER: TOKYO ELECTRON LIMITED 3-6 AKASAKA 5-CHOME, MINATO; EFFECTIVE

DATE: 20000809

ASSIGNMENT OF ASSIGNORS INTEREST;ASSIGNORS:SUZUKI, FUJIO;SAKAMOTO, KOICHI;WANG, WENLING;AND OTHERS;REEL/FRAME:011070/0262

20031007 US/RF-A

REISSUE APPLICATION FILED

EFFECTIVE DATE: 20030630

Update Code :

2004-30

1 / 1 CRXX - ©CLAIMS/RRX

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Patent Assignee :

Tokyo Electron Ltd JP

Actions :

20030630 REISSUE REQUESTED

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REISSUE REQUEST NUMBER: 10/608006

EXAMINATION GROUP RESPONSIBLE FOR REISSUEPROCESS: 3742

Reissue Patent Number:

Session finished: 18 MAR 2005 Time 20:05:29

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